Patent Claims

1. An antenna structure of an essentially flat form with a ground connection and at least one RF supply connection, which is designed for use for at least two frequency bands,
characterized
in that the antenna structure has two antenna branches (Z1, Z2) from a foot area (F) which surrounds the ground connection (P2),
two RF supply connections (P1, P3), which are arranged at a distance from one another, are provided in the foot area (F), and the two antenna branches (Z1, Z2) of the antenna structure are designed such that their associated frequency bands overlap.

2. The antenna structure as claimed in claim 1,
characterized
in that the antenna structure is a planar, inverted F structure.

3. The antenna structure as claimed in claim 1 or 2,
characterized
in that the two antenna branches (Z1, Z2) of the antenna structure are each designed in a meandering shape.

4. The antenna structure as claimed in claim 3,
characterized
in that the two antenna branches (Z1, Z2) are in the form of a double meander.

5. The antenna structure as claimed in one of claims 3 or 4, characterized in that the distance between the two meandering antenna branches (Z1, Z2) is in the range between 0.5 and 10 mm.

6. The antenna structure as claimed in one of claims 1 to 5, characterized
in that the distance between the two RF supply connections (P1, P3) is in the range between 5 and 30 mm.

7. The antenna structure as claimed in one of claims 1 to 6, characterized
in that the antenna structure has an excitation circuit with an RF supply line C, which branches to the two RF supply connections (P1, P3).

8. The antenna structure as claimed in one of claims 1 to 7, characterized
in that the antenna structure is designed for the GSM 850 and EGSM 900 mobile radio standard frequency ranges.

9. The antenna structure as claimed in one of claims 1 to 8, characterized
in that the antenna structure is designed for the GSM 1800 and EGSM 1900 mobile radio standard frequency ranges.

10. The antenna structure as claimed in one of claims 1 to 9, characterized
in that the two antenna branches (Z1, Z2) of the antenna structure each have a length which corresponds to the value $\lambda/4$ of a mean wavelength of one of the frequency bands.